

## CLAIMS

What is claimed is:

- 1                   1.       A method for Short Message Services (SMS) provisioning in a system  
2 including a Home Location Register (HLR), a Message Center (MC), and a Mobile  
3 Switching Center (MSC) including a Mobile Switching Center point code scheme,  
4 comprising the steps of:  
5                   storing location data for said MSC in said HLR;  
6                   receiving a request from said MC to deliver a SMS message to said MSC;  
7                   determining a MC point code scheme for said MC;  
8                   comparing the MC point code scheme with the MSC point code scheme;  
9                   populating said SMS message with the MSC point code scheme if the MSC  
10 and MC point code schemes are the same; and  
11                  delivering said SMS message from said MC to said MSC.

1                   2.     A method for Short Message Services (SMS) provisioning in a system  
2 including a Home Location Register (HLR), a Message Center (MC), a Mobile Switching  
3 Center (MSC), including a Mobile Switching Center point code scheme, comprising the steps  
4 of:

5                   storing location data for said MSC in said HLR, wherein said location data  
6 includes at least one Mobile Switching Center Identification Number (MSCIN) parameter;  
7                   receiving a request from said MC to deliver a SMS message to said MSC;  
8                   determining a MC point code scheme for said MC;  
9                   comparing the MC point code scheme with the MSC point code scheme;  
10                  populating said SMS message with the MSC point code scheme if the MSC  
11 and MC point code schemes are the same;  
12                  otherwise, populating said SMS message with the MSCIN parameter; and  
13                  delivering said SMS message from said MC to said MSC.

1                   3.     A method for Short Message Services (SMS) provisioning in a system  
2 including a Home Location Register (HLR), a Message Center (MC), a Mobile Switching  
3 Center (MSC), including a Mobile Switching Center point code scheme, comprising the steps  
4 of:

5                   storing location data for said MSC, wherein said location data includes a SMS  
6 address in said HLR and wherein said location data does not contain a MSCIN parameter;  
7                   receiving a request from said MC to deliver a SMS message to said MSC;  
8                   determining a MC point code scheme for said MC;  
9                   comparing the MC point code scheme with the MSC point code scheme;  
10                  populating said SMS message with the MSC point code scheme if the MSC  
11 and MC point code schemes are the same; and  
12                  delivering said SMS message from said MC to said MSC.

1                   4.     The method of Claim 2, wherein the MSCIN parameter is in Global  
2 Title Address (GTA) format.

1                   5.     The method of Claim 4, wherein said GTA format uses an E.212  
2 identifier.

1                   6.     The method of Claim 4, wherein said GTA format uses an E.164  
2 identifier.

1                   7.       The method of Claim 4, wherein said GTA format uses a combination  
2 of said E.212 and E.164 identifiers.

1                   8.       The method of Claim 1, wherein said HLR has a database including at  
2 least one country code and at least one corresponding point code scheme.

1                   9.       The method of Claim 8, wherein said point code scheme is specified  
2 according to American National Standards Institute (ANSI) standard-41.

1                   10.      The method of Claim 8, wherein said point code scheme is specified  
2 according to International Telecommunication Union (ITU) standard Q.700.

1                   11.      The method of Claim 8, wherein the step of comparing the MC point  
2 code scheme with the MSC point code scheme occurs in said database in said HLR.

1                   12.      The method of Claim 1, wherein the step of determining the MC point  
2 code scheme further includes the step of determining a nationality of the MC.

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at  
"05/22/2004"  
"05/22/2004"

1 13. A node for determining whether a Message Center (MC) and a Mobile  
2 Switching Center (MSC) share a common point code, comprising:  
3 a memory including a database having a plurality of point code schemes and a  
4 corresponding plurality of country codes.

1 14. The node of Claim 13 wherein the node is a Home Location Register (HLR).

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